

REMARKS

Claims 1-22 and 30-36 are pending in the present application. The Office Action states that claims 1-22 and 30-36 were rejected as being obvious over U.S. Patent No. 5,890,051 ("Schlang") in view of U.S. Patent No. 5,341,110 ("Nardi").

I. UNRESPONSIVE OFFICE ACTION

The Office Action in the "Response to Arguments" section in the Office Action dated June 4, 2004 only addressed Applicants' arguments relating to the propriety of combining Schlang and Nardi. The Office Action did not address another significant flaw in the presentation of the Office Action dated June 4, 2004 in that the Office Action dated June 4, 2004 did not present a *prima facie* case of obviousness, a substantial argument which was made by Applicants in the Response dated December 1, 2003.

In some parts of the Office Action, elements of only independent claims were discussed in rejecting the independent claims and some dependent claims; however, elements specific to some dependent claims were not discussed. Thus, the Office Action rejected the dependent claims without discussing the specific elements of the dependent claims. Accordingly, the Examiner did not present a *prima facie* case of obviousness with respect to those dependent claims.

Applicants have reproduced below the section entitled "III. Prima Facie Case of Obviousness" which was copied from the Response dated December 1, 2003. Applicants respectfully request that the Examiner address at least these arguments and others set forth below in a subsequent responsive Office Action.

III. PRIMA FACIE OBVIOUSNESS

Applicants respectfully request that the next Office Action, if necessary, more clearly demonstrate a *prima facie* case of obviousness. M.P.E.P. § 2142 states that

[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

In particular, Applicants respectfully request that the next Office Action discuss each and every element as set forth by the claims. For example, the Examiner rejected claims 1 and 4-8 merely on a discussion of some of the elements as set forth in claim 1. Claims 4-8 recite elements such as, for example, "a harmonic of the second signal", "a limiter" and "a charge pump" as well as other elements (e.g., elements related to the above-recited elements). These elements must be considered and discussed in view of documents cited by the Examiner. Applicants further draw the attention of the Examiner to claims 11-15, which were rejected by merely discussing some of the elements as set forth in claim 9, and to claims 20-22, which were rejected by merely discussing some of the elements as set forth in claim 16.

II. CLARIFICATION OF EXAMINER'S INTERPRETATION OF PATENT LAW

In the Response dated December 1, 2003, Applicants state the following:

In fact, the combination of Schlang and Nardi would render Nardi unsatisfactory for its intended purpose as a low noise reference oscillator. Furthermore, the combination of Schlang and Nardi would render Schlang unsatisfactory for its intended purpose as a mobile phone since the Nardi oscillator circuit would be inoperable in such an environment. Thus, according to M.P.E.P. § 2143.01, there is no motivation or suggestion for combining the teachings of Schlang and Nardi. See, e.g., the section entitled "The Proposed Modification Cannot Render the Prior Art Unsatisfactory for Its Intended Purpose" of M.P.E.P. § 2143.01.

Clarification No. 1 Sought from the Examiner: Does the Examiner agree that placing a Nardi oscillator circuit in a Schlang mobile phone would render Schlang unsatisfactory for its intended purpose as a mobile phone? In other words, does the Examiner agree that placing a Nardi oscillator circuit in a Schlang mobile phone would render Schlang mobile phone unsatisfactory for its intended purpose as a mobile phone, BUT that the Examiner contends that his arguments made in the Office Action overcome this argument?

If the Examiner believes that placing a Nardi oscillator circuit in a Schlang mobile phone would NOT render Schlang unsatisfactory for its intended purpose, then what evidence does the Examiner provide to counter the rebuttal evidence provided by Applicants?

In the Response dated December 1, 2003, Applicants presented rebuttal evidence (i.e., as defined in the M.P.E.P., evidence rebutting the Examiner's allegedly *prima facie* case of

obviousness) that the YIG-based phase-locking oscillator circuit taught by Nardi is, among other things, very sensitive and destabilizes very easily (e.g., even vibrations from the wind can destabilize the oscillator circuit) in a mobile phone environment such as Schlang. Applicants respectfully request that the Examiner analyze the article enclosed with the Response filed on December 1, 2004 entitled: "Design A Low-Noise Synthesizer Using YRO Technology". There is ample evidence there that a YIG-based phase-locking oscillator circuit taught by Nardi would be inoperable in a Schlang mobile phone environment.

The Office Action dated June 6, 2004 did not appear to consider the rebuttal evidence presented by Applicants and certainly did not present any evidence to counter the rebuttal evidence present by Applicants. On what basis in fact (as opposed to mere conclusory statements) does the Examiner base his decision to maintain the rejection in view of Applicants' rebuttal evidence and arguments in the Response of December 1, 2004?

Clarification No. 2 Sought from the Examiner: Is the Examiner bound by the M.P.E.P. conclusion in M.P.E.P. § 2143.01 that "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification"? Applicants merely quoted the elements of an M.P.E.P. § 2143.01 determination and the mandated conclusion as set forth in the M.P.E.P., which is presumably binding on the Examiner.

The Examiner states that it is "applicant's argument that there is no suggestion to combine the references". Office Action at page 9. However, it is not merely Applicant's argument, it is the *mandated conclusion* of the M.P.E.P. § 2143.01. Is not the Examiner bound by this conclusion? Is the Examiner possibly confusing a teach-away analysis, in which factors are weighed, and an M.P.E.P. § 2143.01 determination, in which the M.P.E.P. sets an overriding conclusion?

In rebuttal to Examiner's argument stated in "Response to Arguments" in the Office Action dated June 4, 2004: If, as argued by the Examiner, merely finding a reason to combine references were enough to overcome M.P.E.P. § 2143.01, then M.P.E.P. § 2143.01 loses any meaning (which cannot be true). After all, if there is no reason to combine the references in the first place, then the Examiner has not presented a *prima facie* case of obviousness and there is no need to ever get to an M.P.E.P. § 2143.01 determination. All cases that are considered in view of M.P.E.P. § 2143.01 already have references that were combined for an alleged reason or

motivation; nevertheless, *despite* the alleged reasons for combining, M.P.E.P. § 2143.01 supersedes the Examiner's reasons for combining because (1) it is a mandated conclusion and (2) logically, how can the Examiner justify combining the Nardi oscillator circuit with the Schlang mobile phone when such a combination would make the Schlang mobile phone inoperable for the above-stated reasons and other reasons stated in the Response dated December 1, 2004 and the above-mentioned article. If the Schlang mobile phone will not function because of, for example, the sensitivity and destabilization of the Nardi oscillator circuit, then how can the Examiner justify combining Nardi and Schlang? The Examiner certainly has not presented any evidence (e.g., evidence rebutting the evidence presented in the article) or arguments addressing these issues which should have been addressed in the Office Action dated June 4, 2004. Applicants respectfully request that all of the issues discussed herein be address, in full, in a subsequent office action.

That there is "no motivation suggestion or motivation to make the proposed modification" MUST be a mandated conclusion under M.P.E.P. § 2143.01 because every case that comes before the purview of M.P.E.P. § 2143.01 already has some alleged reason for combining references.

In other words, *although as a matter of fact*, the Examiner has presented an alleged reason for combining Nardi and Schlang, if Applicants show that the "proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose" thereby satisfying the elements of an M.P.E.P. § 2143.01 determination, then the conclusion, *as a matter of law*, is that "there is no suggestion or motivation to make the proposed modification" according to the M.P.E.P.

Accordingly, Schlang and Nardi cannot be properly combined and the rejection of claims 1-22 and 30-36 cannot be maintained.

III. OTHER ARGUMENTS

To maintain an obviousness rejection, each and every element recited in the claims must be taught by the references. Applicants respectfully submit that each and every element recited in the claims are not taught by the combination of Schlang in view of Nardi. For example, independent claims 1 and 9 recite "a subsampling mixer". In support of the rejection, the Office Action cites Schlang at col. 3, line 63 to col. 4, line 11; col. 8, lines 15-26; and col. 9, line 56 to

col. 10, line 11. Applicants have carefully perused the text of Schlang cited in the Office Action and cannot find any teachings related to a subsampling mixer as set forth in the claims. Accordingly, Schlang does not teach a subsampling mixer as recited in claims 1 and 9. In addition, Applicants respectfully submit that Nardi does not make up for the teaching deficiencies of Schlang. Thus, the combination of Schlang in view of Nardi does not teach each and every element as set forth in claims 1 and 9. It is therefore respectfully requested that the obviousness rejection be withdrawn with respect to claims 1 and 9 and their dependent claims (i.e., claims 2-8 and 10-15).

In another example, independent claims 16 and 30 recite "mixing the first signal with a second signal to produce a mixed signal" and "filtering the mixed signal to generate a difference signal between the frequency of the first signal and a harmonic of the second signal". In support of the rejection with respect to the filter means, the Office Action cites Schlang at component 15 of FIG. 4 and col. 8, lines 27-45. Applicants have carefully perused the text of Schlang cited in the Office Action and cannot find any teachings related to "a difference signal between the frequency of the first signal and a *harmonic* of the second signal" as set forth in the claims. Instead, col. 8, lines 27-45 of Schlang merely describes a divide-by-M1 circuit 35. There is no mention of harmonics of signals being used in difference signals. In addition, Applicants respectfully submit that Nardi does not make up for the teaching deficiencies of Schlang. Thus, the combination of Schlang in view of Nardi does not teach each and every element as set forth in claims 16 and 30. It is therefore respectfully requested that the obviousness rejection be withdrawn with respect to claims 16 and 30 and their dependent claims (i.e., claims 17-22 and 31-36).

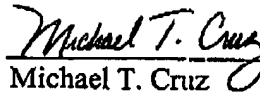
IV. CONCLUSION

In view of at least the foregoing, it is respectfully submitted that the pending claims 1-22 and 30-36 are in condition for allowance. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the below-listed telephone number.

Please charge any required fees not paid herewith or credit any overpayment to the
Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

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Respectfully submitted,



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